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Date: 5/3/2010 2:44 PM
Subject: Abengoa Solar
Attachments: Abengoa LESA Worksheets.pdf

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DATE MAY 03 2010

RECD. MAY 03 2010

Dear Ms. Huerta:

We (the DOC) are readdressing our statements in the letter dated April 7th, 2010. We recently received a copy of the LESA analysis prepared for the Abengoa solar project, which we did not originally have when we reviewed the email dated March 16, 2010. At that time it was assumed that we were receiving a pre-consultation of the project since we had not received a notice to comment on the project. Our initial letter was based on (what we now know as) an incomplete emailed copy of the Land Use section and the information contained in the email. During our review of the LESA model (found in the Staff Assessment online) we found discrepancies that we have attempted to correct, and based on the corrected LESA analysis we concur with the applicants' suggested mitigation amounts of 128 acres of Important Farmland. Please remember, our analysis and corrections are suggestions only. You have the most complete data for the project. Our review of the LESA model was based on a review of the online Staff Assessment, most specifically the Land Use and Soil and Water Resources sections.

Please see the revised Abengoa LESA model (attached).

Sincerely,

Meri Meraz

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<http://www.royalty-free-pictures.com/product.php/1420/english_countryside/bdefae70a5970ac660d6b5284d6b4c16> Please consider the environment before printing this e-mail

Appendix A. California Agricultural LESA Worksheets

NOTES

The DOC has reviewed the Abengoa Solar project LESA model prepared by the CEC. Discrepancies were found between the CEC's model and the one prepared by the DOC, with regard to water availability in the project area, which the DOC based on the Soil and Water Resources section of the Staff Assessment. The adjudication of the Mojave Basin area and its mandate to conserve water significantly reduces the project area's water availability and therefore the final score of the LESA model, redefining its potential impact on agricultural resources in the area.

Calculation of the Land Evaluation (LE) Score

Part 1. Land Capability Classification (LCC) Score:

- (1) Determine the total acreage of the project.
- (2) Determine the soil types within the project area and enter them in **Column A** of the **Land Evaluation Worksheet** provided on page 2-A.
- (3) Calculate the total acres of each soil type and enter the amounts in **Column B**.
- (4) Divide the acres of each soil type (**Column B**) by the total acreage to determine the proportion of each soil type present. Enter the proportion of each soil type in **Column C**.
- (5) Determine the LCC for each soil type from the applicable Soil Survey and enter it in **Column D**.
- (6) From the LCC Scoring Table below, determine the point rating corresponding to the LCC for each soil type and enter it in **Column E**.

LCC Scoring Table

LCC Class	I	Ile	IIs,w	IIle	IIIs,w	IVe	IVs,w	V	Vle,s,w	Vlle,s,w	VIII
Points	100	90	80	70	60	50	40	30	20	10	0

- (7) Multiply the proportion of each soil type (**Column C**) by the point score (**Column E**) and enter the resulting scores in **Column F**.
- (8) Sum the LCC scores in **Column F**.
- (9) Enter the LCC score in box <1> of the **Final LESA Score Sheet** on page 10-A.

Part 2. Storie Index Score:

- (1) Determine the Storie Index rating for each soil type and enter it in **Column G**.
- (2) Multiply the proportion of each soil type (**Column C**) by the Storie Index rating (**Column G**) and enter the scores in **Column H**.
- (3) Sum the Storie Index scores in **Column H** to gain the Storie Index Score.
- (4) Enter the Storie Index Score in box <2> of the **Final LESA Score Sheet** on page 10-A.

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
112 Statewide	57 irrigated	0.033	IIIe	70	2.31	50	1.65
112 Statewide	809.8 non-irr	0.465	VIIe	10	4.65	50	23.25
117 Prime	30 irrigated	0.017	IIIe	70	1.19	57	0.97
117 Prime	638.5 non-irr	0.367	VIIe	10	3.67	57	20.92
137 Prime	41 irr	0.024	Ile	90	2.16	86	2.06
152 178	148.4 16.4	0.085 0.009	VIIIs n/a	10 n/a	0.85 n/a	40 n/a	3.4 n/a
Totals	1,741.10	(Must Sum to 1.0)		LCC Total Score	14.83	Storie Index Total Score	52.25

*Soil characteristics data and Storie Index Scores were gathered from the NRCS online database 4/29/10.

*Map Soil #178 = water, which does not carry a land capability classification. Water data found onsite is assumed to be related to the nearby wetland area maintained by the BLM.

*The NRCS lists Soil Map #117 and #137 as Prime Farmland and Soil Map #112 as Farmland of Statewide Importance.

*The DOC made the assumption that the best soils would be irrigated and recognized 71 acres of Prime irrigated farmland and 57 acres of irrigated Farmland of Statewide Importance per the Farmland Mapping and Monitoring Program (FMMP). The remainder of the land is non-irrigated per the CEC project description.

Site Assessment Worksheet 1.

Project Size Score

I	J	K
LCC Class I - II	LCC Class III	LCC Class IV - VIII
	57	
		809.8
	16	
		652.5
41		
n/a	n/a	148.4 n/a
41	73	1,610.70
80	70	100

Total Acres

**Project Size
Scores**

**Highest Project
Size Score**

100

NOTES

Calculation of the Site Assessment (SA) Score

Part 1. Project Size Score:

- (1) Using **Site Assessment Worksheet 1** provided on page 2-A, enter the acreage of each soil type from **Column B** in the **Column - I, J or K** - that corresponds to the LCC for that soil. (Note: While the Project Size Score is a component of the Site Assessment calculations, the score sheet is an extension of data collected in the Land Evaluation Worksheet, and is therefore displayed beside it).
- (2) Sum **Column I** to determine the total amount of class I and II soils on the project site.
- (3) Sum **Column J** to determine the total amount of class III soils on the project site.
- (4) Sum **Column K** to determine the total amount of class IV and lower soils on the project site.
- (5) Compare the total score for each LCC group in the Project Size Scoring Table below and determine which group receives the highest score.

Project Size Scoring Table

Class I or II		Class III		Class IV or Lower	
Acreage	Points	Acreage	Points	Acreage	Points
>80	100	>160	100	>320	100
60-79	90	120-159	90	240-319	80
40-59	80	80-119	80	160-239	60
20-39	50	60-79	70	100-159	40
10-19	30	40-59	60	40-99	20
10<	0	20-39	30	40<	0
		10-19	10		
		10<	0		

- (6) Enter the **Project Size Score** (the highest score from the three LCC categories) in box <3> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Part 2. Water Resource Availability Score:

- (1) Determine the type(s) of irrigation present on the project site, including a determination of whether there is dryland agricultural activity as well.
- (2) Divide the site into portions according to the type or types of irrigation or dryland cropping that is available in each portion. Enter this information in **Column B** of **Site Assessment Worksheet 2. - Water Resources Availability**.
- (3) Determine the proportion of the total site represented for each portion identified, and enter this information in **Column C**.
- (4) Using the Water Resources Availability Scoring Table, identify the option that is most applicable for each portion, based upon the feasibility of irrigation in drought and non-drought years, and whether physical or economic restrictions are likely to exist. Enter the applicable Water Resource Availability Score into **Column D**.
- (5) Multiply the Water Resource Availability Score for each portion by the proportion of the project area it represents to determine the weighted score for each portion in **Column E**.
- (6) Sum the scores for all portions to determine the project's total Water Resources Availability Score
- (7) Enter the Water Resource Availability Score in box <4> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 2. - Water Resources Availability

A	B	C	D	E
Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score (C x D)
1	Irrigated Farmland	0.074	75	5.55
2	Non-irrigated farmland former grazing land	0.926	50	46.3
3				
4				
5				
6				
		(Must Sum to 1.0)	Total Water Resource Score	51.85

*Irrigated Farmland = 57 acres Farmland of Statewide Importance + 71 acres of Prime Farmland for a total of 128 acres of irrigated farmland.

*Assumptions in choosing an option under the Water Resource Availability Scoring Table (page A-6) were based on water resources being extremely limited per the Soil and Water Resources section of the Staff Assessment and the adjudication of the Mojave Basin area and it's mandate to conserve water.

Water Resource Availability Scoring Table

Option	Non-Drought Years			Drought Years			WATER RESOURCE SCORE
	RESTRICTIONS			RESTRICTIONS			
	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	
1	YES	NO	NO	YES	NO	NO	100
2	YES	NO	NO	YES	NO	YES	95
3	YES	NO	YES	YES	NO	YES	90
4	YES	NO	NO	YES	YES	NO	85
5	YES	NO	NO	YES	YES	YES	80
6	YES	YES	NO	YES	YES	NO	75
7	YES	YES	YES	YES	YES	YES	65
8	YES	NO	NO	NO	-- --	-- --	50
9	YES	NO	YES	NO	-- --	-- --	45
10	YES	YES	NO	NO	-- --	-- --	35
11	YES	YES	YES	NO	-- --	-- --	30
12	Irrigated production not feasible, but rainfall adequate for dryland production in both drought and non-drought years						25
13	Irrigated production not feasible, but rainfall adequate for dryland production in non-drought years (but not in drought years)						20
14	Neither irrigated nor dryland production feasible						0

*Option 6 was chosen for irrigated farmland
 *Option 8 was chosen for non-irrigated farmland

NOTES

Part 3. Surrounding Agricultural Land Use Score:

- (1) Calculate the project's Zone of Influence (ZOI) as follows:
 - (a) a rectangle is drawn around the project such that the rectangle is the smallest that can completely encompass the project area.
 - (b) a second rectangle is then drawn which extends one quarter mile on all sides beyond the first rectangle.
 - (c) The ZOI includes all parcels that are contained within or are intersected by the second rectangle, less the area of the project itself.
- (2) Sum the area of all parcels to determine the total acreage of the ZOI.
- (3) Determine which parcels are in agricultural use and sum the areas of these parcels
- (4) Divide the area in agriculture found in step (3) by the total area of the ZOI found in step (2) to determine the percent of the ZOI that is in agricultural use.
- (5) Determine the Surrounding Agricultural Land Score utilizing the Surrounding Agricultural Land Scoring Table below.

Surrounding Agricultural Land Scoring Table

Percent of ZOI in Agriculture	Surrounding Agricultural Land Score
90-100	100
80-89	95
70-79	90
65-69	85
60-64	80
55-59	70
50-54	60
45-49	50
40-44	40
35-39	30
30-34	20
20-29	10
<19	0

- (5) Enter the Surrounding Agricultural Land Score in box <5> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 3.

Surrounding Agricultural Land and Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence					Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)		
11,035	220	480	2	4	0	0

*The DOC did not have the CEC's information to review this portion of the LESA model, but does not have any concerns with the data or it's outcome. Therefore data was copied from the original LESA model and entered above.

NOTES

Part 4. Protected Resource Lands Score:

The Protected Resource Lands scoring relies upon the same Zone of Influence information gathered in Part 3, and figures are entered in Site Assessment Worksheet 3, which combines the surrounding agricultural and protected lands calculations.

- (1) Use the total area of the ZOI calculated in Part 3. for the Surrounding Agricultural Land Use score.
- (2) Sum the area of those parcels within the ZOI that are protected resource lands, as defined in the California Agricultural LESA Guidelines.
- (3) Divide the area that is determined to be protected in Step (2) by the total acreage of the ZOI to determine the percentage of the surrounding area that is under resource protection.
- (4) Determine the Surrounding Protected Resource Land Score utilizing the Surrounding Protected Resource Land Scoring Table below.

Surrounding Protected Resource Land Scoring Table

Percent of ZOI Protected	Protected Resource Land Score
90-100	100
80-89	95
70-79	90
65-69	85
60-64	80
55-59	70
50-54	60
45-49	50
40-44	40
35-39	30
30-34	20
20-29	10
<20	0

- (5) Enter the Protected Resource Land score in box <6> of the **Final LESA Score Sheet** on page 10-A.

NOTES

*Per the California Agricultural LESA Scoring Thresholds table (page A-11), the LE and SA subscores are not each greater than or equal to 20 points. Therefore the project would not be considered Significant under CEQA.

*However, it is the policy of the DOC to always suggest mitigations for loss of agricultural lands. Considering that the score is less than four points off from being considered Significant, the DOC would like to see the 128 acres of irrigated Prime and Farmland of Statewide Importance mitigated for and would support the project applicant's suggested mitigation of conserving a minimum of 128 acres of Important Farmland or contribution of mitigation fees to allow for protection of such.

Final LESA Score Sheet

Calculation of the Final LESA Score:

- (1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores column.
- (2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
- (3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
- (4) Sum the total LE and SA scores to determine the Final LESA Score for the project.

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	<1> 14.83	0.25	3.71
Storie Index	<2> 52.25	0.25	13.06
LE Subtotal		0.50	16.77
SA Factors			
Project Size	<3> 100	0.15	15
Water Resource Availability	<4> 51.85	0.15	7.78
Surrounding Agricultural Land	<5> 0	0.15	0
Protected Resource Land	<6> 0	0.05	0
SA Subtotal		0.50	22.78
Final LESA Score			39.55

For further information on the scoring thresholds under the California Agricultural LESA Model, consult Section 4 of the Instruction Manual.

California Agricultural LESA Scoring Thresholds

Total LESA Score		Scoring Decision
0 to 39 points		Not Considered Significant
40 to 59 points		Considered Significant <u>only</u> if LE <u>and</u> SA subscores are each <u>greater</u> than or equal to 20 points
60 to 79 points		Considered Significant <u>unless</u> either LE <u>or</u> SA subscore is <u>less</u> than 20 points
80 to 100 points		Considered Significant

The California Agricultural LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands during the Initial Study phase of the CEQA review process. Scoring thresholds are based upon both the total LESA score as well the component LE and SA subscores. In this manner the scoring thresholds are dependent upon the attainment of a minimum score for the LE and SA subscores so that a single threshold is not the result of heavily skewed subscores (i.e., a site with a very high LE score, but a very low SA score, or vice versa). For additional information on the significance scoring thresholds under the California Agricultural LESA Model, consult Section 4 in the LESA Instruction Manual.